

PROGRESSIVE FARMER

THE INDUSTRIAL AND EDUCATIONAL INTERESTS OF OUR PEOPLE PARAMOUNT TO ALL OTHER CONSIDERATIONS OF STATE POLICY.

Vol. 17

Raleigh, N. C., May 13, 1902.

No. 14

Agriculture.

THE FARMERS' NATIONAL CONGRESS.

The 1902 Annual Session Will be Held in Macon, Ga., and the Occasion Will be a Notable One.

Correspondence of The Progressive Farmer.

It is quite probable that farmers generally do not fully realize the scope and extent of the Farmers' National Congress, as otherwise they would take a much deeper interest in it. The topics discussed are more particularly those of a national or international character, quite different from what is generally on the programme at farmers' institutes. The following is a copy of the program for the 1902 meeting:

1. Inter-oceanic canal; 2. National irrigation; 3. Reciprocity—how may it affect agricultural interests? 4. Effect of present insular possessions on the agriculture of the United States; 5. Preservation of forest and fruit trees and reforestation; 6. Injurious insects, insect pests and fungi; 7. What part of a man's farm does he sell when he sells the crop? 8. Postal reforms particularly affecting the farmer; 9. Mutual relations of Northern and Southern farmers; 10. Dairy insects of the United States as related to the markets of the world; 11. Farm products other than dairy products in the markets of the world; 12. The labor problem from the farmer's standpoint; 13. How can we best build up our merchant marine?

The Farmers' National Congress is made up of delegates and associate delegates appointed by the Governors of each State. Every Governor appoints as many delegates as the State has representatives in both Houses of Congress, and as many associate delegates as he chooses.

The meeting will be held at Macon, Ga., Oct. 7-10, and the people of that city will give a hearty welcome to all who attend.

The Southeastern Passenger Association has granted a rate of one fare for round trip; and there is a fair indication that the other passenger associations will make better than an excursion rate.

The men who will be invited to take part in the program will be the choicest that can be selected, and each one will be an acknowledged leader in his line. Isn't it about time the farmers took a practical hand in helping to solve the problems that pertain to their own affairs?

We hope to have at least 1,000 delegates, associate delegates and visitors.

John M. Stahl, 4328 Langley Ave., Chicago, is Secretary, and will gladly answer any correspondence for the Congress.

J. H. REYNOLDS, Treas.
Adrian, Mich.

A NEW BULLETIN, "CLEARING NEW LAND."

Correspondence of The Progressive Farmer.

There are but few farms that have not a patch overgrown with scrub bushes and small trees which the farmer has neglected to clear, owing probably to lack of time or dislike to tackle a hard job or maybe to his belief or notion that the ownership of land imparts respectability, even if untitled. It is often these small tracts, if properly cleared and tilled, which will be of profit to the owner. If they are not to be cultivated they should be converted into wood lots.

Franklin Williams, Jr., the author of a new farmers' bulletin (No. 150) on "Clearing New Land" states, "if he is a benefactor of mankind who succeeds in making two blades of grass grow where only one grew before, how much more beneficent is the mission of making grass grow where only bushes were wont to thrive."

This bulletin contains many practical hints to farmers who own scrub patches for it suggests not only different methods of clearing, but also the method of cultivation of this cleared land and what crops to grow thereon.

"There is no question," states Mr. Williams, "about the profitable cultivation of new land. The problem is when and how to clear it. When once the clearing has been com-

pletely accomplished the yield from such lands will be more satisfactory than the harvest from old fields. In fact, in many instances, it would be wise and economical for the farmer to plant his old worn and washed fields to forest and clear land for cultivation."

The author recommends various methods of bringing such land into productivity, from the use of dynamite to the grazing of Angora goats thereon.

GUY E. MITCHELL.
Washington, D. C.

THE VALUE OF STABLE MANURE.

In a recent report of the Oklahoma Station Director Fields makes the following statements regarding the value of stable manure, which apply to other portions of the country as well as to Oklahoma:

On the outskirts of every town in Oklahoma may be seen a collection of manure piles that have been hauled out and dumped in waste places. The plant food in each ton of this manure is worth at least \$2—that is what Eastern farmers pay for similar material, and they make money by doing it. And yet, almost every liveryman has to pay some one for hauling the manure away. This is simply because farmers living near these towns are missing a chance to secure something for nothing—because, perhaps, the profit is not directly in sight. But from most soils there is a handsome profit possible from a very small application of stable manure.

On the farm of the Oklahoma Agricultural Experiment Station is an acre that has been in wheat for eight years. It had never been manured. In the fall of 1898 one half of the acre was manured at the rate of 15 tons per acre and the other was left unmanured. When the crop was harvested, in the summer of 1899, the manured piece yielded at the rate of 30 bushels per acre and the unmanured yielded but 12 bushels per acre. An increase of 18 bushels of wheat was secured the first year from an application of 15 tons of stable manure. If all of the effect of the manure were exhausted the first season there were 18 bushels of wheat to pay for hauling about 10 loads of manure. But the effect is lasting and extends through a period of several years.

Here is a feasible plan to increase the wheat crop: Put every bit of manure obtainable into the soil. Eighteen hundred bushels of wheat will pay for one man and team hauling manure for 450 days, and the profit is directly in sight.

FARM NOTES FROM PASQUOTANK.

Correspondence of The Progressive Farmer.

The early part of spring was such that many farmers were heard grumbling at the weather, but the last month has been fine for work, very little rain and cool. While the weather was all right for work, it has been rather cool for vegetation to make much progress. There is considerable complaint about potatoes rotting, but we think rotten potatoes will be chiefly confined to small patches and that the decrease in the output on account of the loss will not balance the increase in acreage.

Corn planting was delayed at the usual planting time, but most farmers are through now, and cotton planting is in progress. J. T. B. Pasquotank Co., N. C.

One billion, four hundred and ninety-seven million dollars is the farm value accorded Iowa by the census returns. In addition the value of farm implements and machinery is \$58,000,000 and live stock is \$278,000,000. The total value of farm products for 1899 was \$365,000,000—a million dollars for every day in the year.—Guy E. Mitchell.

We are accused of prejudice against North Carolina poetry, but here is a verse from the Fremont Visitor that seems to be worth passing along:

"A nigger and a cart on the way,
Two bags of goanner and a bale of hay,
All dis got ter be paid for fore de judgment day."

Horticulture.

MANAGING AN APPLE ORCHARD.

Commercial Fertilizers, Root Injury, Habits and Other Matters.

Correspondence of The Progressive Farmer.

Harry Farmer is a good writer, and as a rule he thinks closely and well; but he mistakes in supposing that fruit trees in cultivated fields die and refuse to bear because the humus has been burnt out by the use of chemical manures. More trees die from the improper use of the plow and single-tree around and near them than from all other causes, unless we may except the ravages of worms. The writer's orchard of apple, peach, plum and a few other fruits has been in cotton and corn alternate years for more than ten years, the corn crop manured with lot manure supplemented by bone and potash, the cotton crop with complete chemical fertilizers. The lot manure was mainly pure straw and is put in drill sparingly, and in passing the trees, I usually throw around each a small quantity of bone and potash; but the plowing is done by me or my son, and the trees do not die.

THE TAP ROOT.

It is claimed by some that the longevity of a tree depends on the tap root, that these support the woody parts and the surface roots, the fruit and foliage; but I never saw a tap root of a tree of much size or age that had many fibrous roots such as are used by the trees to take up food. Hence, I conclude that these tap roots are mainly there to give strength to the tree to enable it to withstand storms, and that the fibrous roots near and just below the surface take up the greater part of the food upon which the tree subsists, and the various parts have no choice as to whether it is taken up by the lower roots or those near the surface. It is food they want, and they do not fuss over the route over which it comes.

INJURING THE ROOTS.

Now if this position is true, just in the proportion that you injure or disturb these surface roots, you cut off the tree's chance for food, so it can easily be seen that a tree can be starved to death or so nearly so as to render it unfruitful. Most farms are cultivated by careless or indifferent plowmen, and the results complained of usually follow.

Harry Farmer admits that when crops are grown in orchards which are laid by early the trees bear better and longer; of course, because the root disturbance is less and the time for overcoming it greater.

The buds which make this year's fruit are formed the previous season; but usually after the trees drop their fruit; hence, any late disturbance of the root system must interfere with the development of the fruit buds for the succeeding crop, and correspondingly lessen the vitality of the tree; that the frequent repetition, year after year, of such disturbance will necessarily destroy its vitality.

In former years, orchards were allowed to "rest" each alternate year, and even if the disturbance had been as great, it was not so often and had better time to renew.

SHOULD ORCHARDS BE CULTIVATED?

The writer is of the opinion that orchards should not be cultivated after they get well into bearing, or if they are cultivated the plow should be raised as it approaches near enough to touch the roots.

It is claimed that fruits grow larger in orchards which are cultivated, but keep better when grown in those not cultivated. This is reasonable: the growth of all plants is more rapid under cultivation, and of course develop larger fruits; but the texture of the fruit is not as firm as in those which take more time for development, and this is why they keep better. Moreover, the absence of all root hindrance assures a firmer texture.

KEEPING OFF RABBITS.

Another correspondent recommends the use of grease to keep off rabbits. This will keep them off of a certainty, as the rabbit is strictly a vegetarian; but be careful not to

use much; if you do, you stop up the pores and the bark will slough off to the injury of the tree. I used it ten years ago by applying meat skin and the trees first rubbed when the grease was plentiful suffered from it but not a tree has ever been touched by them till last summer after one had blown down; then they skinned every limb on it, but they did not touch the body! Any animal flesh will repel them; but grease from meat has the advantage of lasting longer.

HIGH TRIMMING.

One other hindrance to success with apple trees is the effects of the sun on their bodies when trimmed high. Under such trimming of young trees you will almost invariably find the bark loose on the south side, caused by the heat of the sun aided by the tossing of the trees by the winds. It is pretty much the same principle on which the boys loose the bark on sourwood to make flutes: he rubs to produce heat and then twists to make it loose!

My remedy is to tie about the body any old bag or old garment as to shade the body on south side.

FUNGUS DISEASES.

Fungus diseases of both body and leaf do much in weakening the vitality of trees. The leaf prepares the food for the tree as the stomach does for animals, hence any impairment of the leaf necessarily cuts off the supply of food, without which neither vegetable nor animal life can be maintained. There is a subtleness about the ravages of this class of diseases that causes them to be overlooked, and therefore they have time to get a stronger hold so the injury from such cause is far greater than is usually supposed.

The bark of trees, on both body and limb, performs a vital function too, just as does the skin on animals, and when diseased, harmful results follow.

Wm. A. BARREY.
Sampson Co., N. C.

PICKING AND MARKETING THE STRAWBERRY.

Correspondence of The Progressive Farmer.

The strawberry business of this country has now become so great that practical directions to convert it into money will well be worth while.

To begin with, no fruit that grows pays better returns for good handling and neat, tasty packing. The aesthetic element enters largely in the sale of the strawberry. People buy them as much because they are beautiful as because they please the palate. Whether the grower shall lose money or make a handsome profit depends fully as much upon the handling as upon the quality of his fruit.

It is no easy matter to insure the proper picking and packing of even a small acreage. To handle a large acreage requires not only industry and skill, but diplomacy in no small degree. For hundreds of disinterested eyes must be induced or compelled to judge color aright and thousands of disinterested fingers coaxed, bribed or compelled into nimbleness. Having had to control, or organize methods of control, for over one thousand pickers at a time, I feel that I am entitled to speak with some confidence.

TO INSURE PROPER PICKING.

The tendency of all crowds is to become mobs. The individual loses the sense of personal responsibility and acts wildly. This tendency is quick to manifest itself among berry pickers. The good management of pickers consists in checking and if possible reversing this tendency. My endeavor is always to so systematize the picking that no one can entirely shirk responsibility for what she or he does. (I put she before he because women and girls make the best pickers—men and boys the worst.)

My fields are divided into five-acre divisions. Each section is placed in charge of a manager, who is required to see that the berries are properly picked and promptly sent in out of sun or rain, as may be, and that the plants are not trampled or berries crushed by careless feet. To each section is assigned a carrier, or when needed two. The duties of the car-

rier are to carry in the berries as fast as picked to the packing houses, and to keep each picker supplied with cups to hold the berries. This costs a trifle more than requiring pickers to take in their berries, but it prevents an immense amount of trampling, keeps the pickers at work and gets the work done better and more promptly.

A PLAN THAT WORKS WELL.

Each picker is numbered and assigned a certain number of rows, numbered to correspond, by means of a wooden stake. On this stake is also written the picker's name. The division manager is required to write the picker's number on each empty cup assigned. This can be quickly done by taking a dozen or more nested cups in the hand at once and writing the number on the outer rim of each. This also places the number where it will be most conspicuous.

Very stringent orders are given and constantly repeated to each picker: not to trample the plants, nor to touch a berry with their hands, but to handle them by the stems alone; to pinch off and leave on each berry half an inch of stem, to always turn the reddest side of the berry up as it is dropped in the cup; to fill the cups full, slightly heaping the centre.

ONE CENTRAL PACKING PLACE.

Even at the expense of taking the berries a considerable distance it is better to have one central packing place. This should be of ample size to hold crates for at least one day's packing and to give good room for packing. My packing is done under large cheaply-built houses, centrally located and arranged with shelves under the windows for empty cups. The windows extend pretty much all around the house. The window sill consists also of a shelf or counter on which the cups of berries can be set and counted when necessary. But most of the berries are brought directly into the house by the carriers, who "tote" in a hand carrier made like a litter, only that it is four stories high. Each carrier holds 96 quart cups, which fills three 32 quart crates.

The tickets are counted 32 in a bundle, with a rubber band around each bundle. The tickets are all in charge of a man stationed at the packing house. His business is to issue to each pair of "toters" three packages, 96 tickets, and to see that they bring in berries to correspond.

THE INSPECTOR.

But the most important man of all is the inspector. He, too, is stationed at the packing house. His duties are to inspect every cup as it comes in, to note the numbers on the cups and see who is picking well, who ill. Of course it is not practicable to empty every cup or basket of berries. But experience soon enables him to detect scamped work even when ever so well masked by ever so smiling a top layer of berries. At the least suspicion he dumps a cup, and if picked wrong there is the sinner's number penciled on the cup. Then both, the offender and the derelict manager of that division is brought to book.

The inspector done, the berries are then passed to the packers and carefully packed in neat, new crates and got into the refrigerator car as soon as possible.

THE COST.

I find that this mode of handling berries costs 10 cents a 32 quart crate by the time they get into the car. Of course this does not cover the picking. It could be done in a looser fashion for 5 cents a crate. My experience is that the 5 cents outlay pays me about 1,000 per cent, as I am confident that I get at least 50 cents per crate more by means of it.

In my 18 years' experience I have seen only one year in which I could not sell every crate of berries I had. My berries have a distinct reputation on the New York market and always sell above market quotations. I am told that I am the largest shipper to that market.

I write this not to boast, but to show that thorough system will enable a man to maintain quality even where large quantities of berries are handled.

O. W. BLACKNALL.
Vance Co., N. C.

The Dairy.

DAIRYING, THE OPPORTUNITY OF SOUTHERN FARMERS.

A Rich Harvest Awaits Those Who Engage in it, Properly Equipped—The Natural Advantages are Ours—Why Has the North Outstripped Us?

Correspondence of The Progressive Farmer.

In the South, there are few industries which are more profitable than dairying, and yet it has not been given very much consideration. This is evidenced by the small number of milch cows kept in the South.

THE DISTRIBUTION OF COWS.

According to the twelfth census, there were 18,112,707 dairy cows in the United States June 1, 1900, or about five cows for every twenty-one persons; but they are not distributed among the different States in proportion to their population. For example, Iowa has a population of 2,251,825 and 1,433,648 dairy cows, or about two cows for every three persons; Illinois has a population of 4,821,550 and 1,064,491 dairy cows, or a little more than one cow for every five persons; and Wisconsin has a population of 2,068,963 and 1,032,811 milch cows or about one cow for every two persons.

But here are the figures for some Southern States: North Carolina has a population of 1,891,192 and only 246,755 dairy cows or less than two cows for every fifteen persons; Florida has a population of 528,542 and 84,274 dairy animals or less than one for every six persons; and South Carolina has a population of 1,340,312 and only 136,333 dairy animals, or in round numbers, about one cow for every ten persons.

SOUTHERN COWS ARE POOR GRADE.

In addition to the small number of dairy cows kept in the Southern States which were taken for comparison, their cows are less valuable than the former. The census report heretofore mentioned shows that the value of the dairy cow of Iowa is \$32.56; of Illinois, \$34.02; and of Wisconsin, \$29.36; while that of North Carolina is only \$18.98, South Carolina, \$20.06, and Florida, \$13.31.

This great difference in the distribution of dairy cows for the manufacture of butter and cheese is not due altogether to climatic conditions, for it is generally conceded that good butter and cheese can be made in nearly all parts of the United States. Furthermore, the winters are shorter here than they are in New York, Iowa, Illinois, Pennsylvania, Wisconsin, Minnesota, Ohio and other States where dairying has become one of the leading agricultural interests.

THE SOUTH ADAPTED TO DAIRYING.

One of the most important requisites for successful dairying is a continuous supply of food; hence when I consider the vast amount of meadow hay, corn, cow peas, clover, rye, vetch, lucerne, alfalfa and cottonseed which might be produced in the South, I exclaim in the language of the Breeders' Gazette: "Nature is indeed kindly disposed toward the Southern planter, too many of whom stand in their own light by persisting in cotton culture to the exclusion of everything else."

WHY DAIRYING LANGUISHERS.

A lack of interest in the dairy industry, is possibly due to several causes, some of which may be mentioned:

(1) The Southern soil and climate are well suited to the growth of cotton, which until recent years has commanded a very high price, and an increased number of cotton mills has caused a corresponding increase in its demands.

(2) The Southern people have not been sufficiently trained in the science and art of agriculture to cause them to realize the important place to which dairying is entitled in Southern husbandry. This statement is substantiated by the Bureau of Animal Industry reports which show that the States that give special instruction in the manufacture of butter and cheese and the sciences of breeding and feeding cattle, are leading the dairy industry.

Reports show that special instruction in dairying is offered in thirty-

[CONTINUED ON PAGE 8.]